



MATERIAL SAFETY DATA SHEET

PRODUCT OPTIMER 7127 CATION FLOCCULANT

Emergency Telephone Number

Medical (312) 920-1510 (24 hours)*

SECTION 1 PRODUCT IDENTIFICATION

TRADE NAME: OPTIMER 7127 CATION FLOCCULANT

DESCRIPTION: An emulsion of a cationic acrylamide polymer

NFPA 704M/HMIS RATING: 1/1 HEALTH 1/1 FLAMMABILITY 0/0 REACTIVITY 0 OTHER
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

SECTION 2 HAZARDOUS INGREDIENTS

Our hazard evaluation has identified the following chemical ingredient(s) as hazardous under OSHA's Hazard Communication Rule, 29 CFR 1910.1200. Consult Section 14 for the nature of the hazard(s).

INGREDIENT(S)	CAS #	APPROX. %
Ethoxylated nonylphenol	9016-45-9	0.1-1
Hydrotreated light distillate	64742-47-8	20-40

SECTION 3 PRECAUTIONARY LABEL INFORMATION

CAUTION: May cause irritation to skin and eyes. Avoid contact with skin, eyes and clothing. Do not take internally.

Empty containers may contain residual product. Do not reuse container unless properly reconditioned.

SECTION 4 FIRST AID INFORMATION

EYES: Flush with water for 15 minutes. Call a physician.
SKIN: Wash thoroughly with soap and rinse with water. Call a physician.
INGESTION: Do not induce vomiting. Give water. Call a physician.

NOTE TO PHYSICIAN: No specific antidote is known. Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

SECTION 5 HEALTH EFFECTS INFORMATION

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin

EYE CONTACT: Can cause moderate irritation.

Industrial Hygiene

NOV 15 1989



MATERIAL SAFETY DATA SHEET

PRODUCT OPTIMER 7127 CATION FLOCCULANT

Emergency Telephone Number

Medical (312) 920-1510 (24 hours)*

SECTION 5 HEALTH EFFECTS INFORMATION

(CONTINUED)

SKIN CONTACT: Can cause moderate irritation.

SYMPTOMS OF EXPOSURE: A review of available data does not identify any symptoms from exposure not previously mentioned, or identified in Section 6 or 14.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not identify any worsening of existing conditions not previously mentioned, or identified in Section 6 or 14.

SECTION 6 TOXICOLOGY INFORMATION

ACUTE TOXICITY STUDIES: Acute toxicity studies have not been conducted on this product, but acute studies have been conducted on a similar product. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RATS):

Ethoxylated nonylphenol LD₅₀ = 3,000 mg/kg

Hydrotreated light distillate LD₅₀ = 40,000 mg/kg

ACUTE DERMAL TOXICITY (ALBINO RABBITS):

Ethoxylated nonylphenol LD₅₀ = Greater than 3,000 mg/kg

Hydrotreated light distillate LD₅₀ = 2,000 - 4,000 mg/kg

PRIMARY SKIN IRRITATION TEST (ALBINO RABBITS):

SKIN IRRITATION INDEX DRAIZE RATING:

2.4/8.0 Ethoxylated nonylphenol

5.2/8.0 Hydrotreated light distillate

PRIMARY EYE IRRITATION TEST (ALBINO RABBITS):

EYE IRRITATION INDEX DRAIZE RATING:

35.5/110.0 Ethoxylated nonylphenol

5/110.0 Hydrotreated light distillate

SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Milky white	FORM: Liquid	ODOR: Sweet
SOLUBILITY IN WATER:	Insoluble	
SPECIFIC GRAVITY:	1.02 @ 60 Degrees F	ASTM D-1298
pH (NEAT):	4.5	ASTM E-70
VISCOSITY:	1350 SUS @ 60 Degrees F	ASTM D-2983
FREEZE POINT:	-5 Degrees F	ASTM D-1177
POUR POINT:	Less than -15 Degrees F	ASTM D-97
FLASH POINT:	None (PMCC)	ASTM D-93



MATERIAL SAFETY DATA SHEET

PRODUCT OPTIMER 7127 CATION FLOCCULANT

Emergency Telephone Number

Medical (312) 920-1510 (24 hours)*

SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

(CONTINUED)

NOTE: These physical properties are typical values for this product.

SECTION 8 FIRE AND EXPLOSION INFORMATION

FLASH POINT: None (PMCC) ASTM D-93

EXTINGUISHING MEDIA: This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable. Use water to cool containers exposed to fire.

UNUSUAL FIRE AND EXPLOSION HAZARD: May evolve NOx under fire conditions.

SECTION 9 REACTIVITY INFORMATION

INCOMPATIBILITY: Avoid water contamination which may cause gelling.

Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO₂, NOx may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

SECTION 10 PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION: Respiratory protection is not normally needed.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a pressure-demand, self-contained breathing apparatus is recommended.

VENTILATION: General ventilation is recommended.

PROTECTIVE EQUIPMENT: Use impermeable gloves and chemical splash goggles (ANSI Z 87.1 requirements and selection of gloves, goggles, shoes, etc.) when attaching feeding equipment or doing maintenance.

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.



MATERIAL SAFETY DATA SHEET

PRODUCT OPTIMER 7127 CATION FLOCCULANT

Emergency Telephone Number

Medical (312) 920-1510 (24 hours)*

SECTION 11 SPILL AND DISPOSAL INFORMATION

IN CASE OF TRANSPORTATION ACCIDENTS, CALL THE FOLLOWING 24-HOUR TELEPHONE NUMBER (312-920-1510)

SPILL CONTROL AND RECOVERY:

Small liquid spills: Contain with absorbent material, such as clay, soil or any commercially available absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. Refer to CERCLA in Section 14.

Large liquid spills: Dike to prevent further movement and reclaim into recovery or salvage drums or tank truck for disposal. Refer to CERCLA in Section 14.

DISPOSAL: If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, (i.e. D001 through D017) nor is it listed under Subpart D.

As a non-hazardous liquid waste, it should be solidified before disposal to a sanitary landfill. Can be incinerated in accordance with local, state and federal regulations.

SECTION 12 ENVIRONMENTAL INFORMATION

AQUATIC DATA: Based upon a similar product.

96 hour static acute LC₅₀ to Bluegill Sunfish = Greater than 100 ppm, less than 1000 ppm

96 hour static acute LC₅₀ to Rainbow Trout = 135 ppm

If released into the environment, see CERCLA in Section 14.

SECTION 13 TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME/HAZARD CODE - PRODUCT IS NOT REGULATED DURING TRANSPORTATION

SECTION 14 REGULATORY INFORMATION

The following regulations apply to this product.



MATERIAL SAFETY DATA SHEET

PRODUCT OPTIMER 7127 CATION FLOCCULANT

Emergency Telephone Number

Medical (312) 920-1510 (24 hours)*

SECTION 14 REGULATORY INFORMATION

(CONTINUED)

FEDERAL REGULATIONS:

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, the following ingredients in this product are hazardous and the reasons are shown below.

Ethoxylated nonylphenol - Eye irritant

Hydrotreated light distillate - Skin irritant, combustible

Hydrotreated light distillate = TWA 350 mg/m³

Refined Petroleum Solvent Criteria Document, July, 1977

CERCLA, 40 CFR 117, 302:

Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986

(TITLE III) - SECTIONS 302, 311, 312 AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):

This product does not contain ingredients listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 and 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):

Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

- XX Immediate (acute) health hazard
- Delayed (chronic) health hazard
- Fire hazard
- Sudden release of pressure hazard
- Reactive hazard

Under Section 311, submittal of MSDS's or a list of product names to the local emergency planning commission, state emergency response commission and local fire department is required after October 17, 1987 if you have:

- 10,000 pounds or more of a hazardous substance, or
- 500 pounds or the threshold planning quantity, whichever is less, of an extremely hazardous substance.

After October 17, 1989, MSDS(s), or a list of product names for



MATERIAL SAFETY DATA SHEET

PRODUCT OPTIMER 7127 CATION FLOCCULANT

Emergency Telephone Number

Medical (312) 920-1510 (24 hours)*

SECTION 14 REGULATORY INFORMATION

(CONTINUED)

all hazardous substances between zero (0) and 10,000 pounds, not previously reported, must be submitted.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):

This product does not contain ingredients (at a level of 1% or greater) on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The chemical ingredients in this product are on the 8(b) Inventory List (40 CFR 710).

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:

If this product becomes a waste, it does not meet the criteria of a hazardous waste.

FEDERAL WATER POLLUTION CONTROL ACT, Clean Water Act, 40 CFR 401.15 (formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):

None of the ingredients are specifically listed.

CLEAN AIR ACT, 40 CFR 60, Section 111, 40 CFR 61, Section 112:

This product does not contain ingredients covered by the Clean Air Act.

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

None of the chemicals on the current Proposition 65 list are known to be present in this product.

MICHIGAN CRITICAL MATERIALS:

This product does not contain ingredients listed on the Michigan Critical Materials Register.

STATE RIGHT TO KNOW LAWS:

This product does not contain ingredients listed by State Right To Know Laws.

SECTION 15 ADDITIONAL INFORMATION

None

SECTION 16 USER'S RESPONSIBILITY

This product material safety data sheet provides health and safety



MATERIAL SAFETY DATA SHEET

PRODUCT OPTIMER 7127 CATION FLOCCULANT

Emergency Telephone Number

Medical (312) 920-1510 (24 hours)*

SECTION 16 USER'S RESPONSIBILITY

(CONTINUED)

information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.

SECTION 17 BIBLIOGRAPHY

ANNUAL REPORT ON CARCINOGENS, U.S. Department of Health and Human Services, Public Health Service, PB 33-135855, 1983.

CASARETT AND DOULL'S TOXICOLOGY, THE BASIC SCIENCE OF POISONS, Doull, J., Klaassen, C. D., and Admur, M. O., eds., Macmillian Publishing Company, Inc., N. Y., 2nd edition, 1980.

CHEMICAL HAZARDS OF THE WORKPLACE, Proctor, N. H., and Hughes, J. P., eds., J. P. Lipincott Company, N.Y., 1981.

DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, Sax, N. Irving, ed., Van Nostrand Reinhold Company, N.Y., 6th edition, 1984.

IARC MONOGRAPHS ON THE EVALUATION OF THE CARCINOGENIC RISK OF CHEMICALS TO MAN, Geneva: World Health Organization, International Agency for Research on Cancer, 1972-1977.

PATY'S INDUSTRIAL HYGIENE AND TOXICOLOGY, Clayton, G. D., Clayton, F. E., eds., John Wiley and Sons, N. Y., 3rd edition, Vol. 2 A-C, 1981.

REGISTRY OF TOXIC EFFECTS ON CHEMICAL SUBSTANCES, U.S. Department of Health and Human Services, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health, 1983 supplement of 1981-1982 edition, Vol. 1-3, OH, 1984.

Title 29 Code of Federal Regulations Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).

THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS IN THE WORKROOM ENVIRONMENT WITH INTENDED CHANGES, American Conference of Governmental Industrial Hygienists, OH.



MATERIAL SAFETY DATA SHEET

PRODUCT OPTIMER 7127 CATION FLOCCULANT

Emergency Telephone Number

Medical (312) 920-1510 (24 hours)*

SECTION 17 BIBLIOGRAPHY

(CONTINUED)

PREPARED BY: John J. Kasper, MSc., Manager Product Safety

DATE CHANGED: 03/15/89

DATE PRINTED: 11/04/89